BY ORDER OF THE
SECRETARY OF THE AIR FORCE

AIR FORCE INSTRUCTION 33-150

30 NOVEMBER 2011

Communications and Information

MANAGEMENT OF CYBERSPACE
SUPPORT ACTIVITIES

COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

This Air Force Instruction (AFI) implements Air Force Policy Directive AFPD 33-1, *Information Resource Management.* It establishes the management of cyberspace resources to include systems, equipment, personnel, time, and money and provides the directive guidance for Air Force cyberspace support activities. This publication applies to all military and civilian Air Force personnel, members of the Air Force Reserve Command (AFRC), Air National Guard (ANG), third-party governmental employee and contractor support personnel in accordance with appropriate provisions contained in memoranda support agreements and Air Force contracts. In this document, the term " cyberspace support activity" is defined as any action taken to restore communications systems/equipment to operational status, to perform preventive maintenance inspections (PMI) on communications systems/equipment and/or components, or to install or remove communications systems/equipment. The term "Communications systems/equipment" is defined as: transmission, switching, processing, systems-control, and network management systems, as well as equipment, software, and facilities, fixed and deployable, that supports a mission area. The intent of this instruction is to ensure only qualified personnel perform cyberspace support activities and prevent damage to communications hardware, software, stored information, and current mission operations. Send recommended changes or comments to Air Force Network Integration Center (AFNIC/ESPP), 203 West Losey Street, Room 1200, Scott AFB IL 62225-5222, through appropriate channels, using AF Form 847, *Recommendation for Change of Publication,* with an information copy to Headquarters United States Air Force (SAF/A6O), 1030 Air Force Pentagon, Washington DC 20330-1030. When collecting and maintaining information protect it by the Privacy Act of 1974 authorized by 10 U.S.C. 8013. Ensure that all records created as a result of processes prescribed in this publication are

maintained in accordance with Air Force Manual (AFMAN) 33-363, *Management of Records* and disposed of in accordance with Air Force Records Disposition Schedule (RDS) located at **https://www.my.af.mil/afrims/afrims/afrims/rims.cfm**. See Attachment 1 for a glossary of references and supporting information.

SUMMARY OF CHANGES

This revision acknowledges Air Force Space Command (AFSPC) as the lead command for all Air Force Cyberspace Operations via the 24th Air Force, and it defines the framework for the Engineering and Installation Governance Structure (EIGS). This revision replaces all instances of the Air Force Communications Agency (AFCA) with the Air Force Network Integration Center (AFNIC), and it clarifies AFNIC responsibilities. This revision changes the title from *Management of Communication Activities* to *Management of Cyberspace Support Activities* to reflect the transformation from communications and information to cyberspace. In addition, it clarifies and defines additional responsibilities at all levels. Minor administrative corrections and reference updates were also made. This revision supersedes AFI 33-104, Base-Level Planning and Implementation. Planning and Implementation activities are documented in MPTO 00-33D-3003. In addition, it clarifies and defines additional responsibilities at all levels.

1. Purpose. This instruction implements new communications systems/equipment activity guidelines and changes or eliminates the requirement to complete redundant procedures and practices. Guidance in this publication is intended to assist Air Force personnel in identifying activities required to support Air Force communications. This instruction is an initiative to reduce the number of SAF/CIO A6 departmental- level publications by changing their publications from "stove-piped" system/program-based to audience/role-based focus. Specific procedural information is located in the more detailed Methods and Procedures Technical Orders (MPTO) or specialized publications. Common core communication services for standard user information (e.g., e-mail, phone, messaging, etc.) are located in AFI 33-100, *Users Responsibilities and Guidance for Information Systems*. Information targeting Air Force commanders is located in AFI 33-101, *Commanders Guidance and Responsibilities.* Guidance for acquisition and sustainment planning is located in AFI 63-101, *Acquisition and Sustainment Life Cycle Management.*

1.1. **Objectives**. The primary objectives of cyberspace support activities are to ensure continuous security, operational availability, and reliability of systems and equipment supporting the Air Force mission. This instruction outlines unit roles and responsibilities to ensure communications systems/equipment are serviceable and properly configured to meet mission requirements.

1.2. **Intent.** This instruction directs the use of MPTO 00-33A-1001, *General Communications Activities Management Procedures and Practice Requirements*, which

establishes implementation guidance and procedures. This instruction directs the use of MPTO 00-33D-3003, *Managing the Cyberspace Infrastructure with the Cyberspace Infrastructure Planning System*, which explains how to use the Cyberspace Infrastructure Planning System (CIPS) to document, fund, distribute, implement, and manage the cyberspace infrastructure. These elements support the objectives in paragraph 1.1. **Note:** This AFI and supporting MPTOs shall not alter or supersede the existing authorities and policies of the Director of National Intelligence (DNI) regarding the protection of Sensitive Compartmented Information (SCI) systems or intelligence, surveillance, reconnaissance mission and mission support systems. This AFI and supporting MPTOs shall not alter or supersede higher authoritative guidance governing Special Access Program (SAP) systems, counterintelligence or law enforcement collection operations, or investigations involving communication systems. When DNI or SAP authorities fail to address areas covered by this AFI, this AFI and associated MPTOs will be followed. If there is conflict between this AFI and associated MPTOs with guidance issued by DNI or SAP authorities, DNI or SAP guidance will take precedence. TOs are available for ordering through the Enhanced Technical Information System (ETIMS) application on the AF Portal, per TO 00-5-1, *Air Force Technical Order System*. Contact unit Technical Order Distribution Office (TODO) for assistance.

2. Roles and Responsibilities. Note: For this instruction, the term major command (MAJCOM) also applies to Numbered Air Forces (NAF), Field Operating Agencies (FOA) and Direct Reporting Units (DRU).

2.1. **Cyberspace Operations (SAF/A6O).** Develops and publishes cyberspace support activities, strategy, policy, tactical doctrine, and programs to integrate warfighting and combat support capabilities, and oversees implementation of enterprise information, information resources, and data management capabilities for Joint, Coalition and Air Force warfighters. Coordinates with military services, MAJCOMs and any additional government agencies as applicable. In addition, SAF/A6O will:

2.1.1. Manage cyberspace operations career fields.

2.1.2. Act as the approval authority for waiver requests to deviate from the requirements of this publication.

2.1.3. Appoint a lead command according to AFI 10-901, *Lead Operating Command--Communications and Information Systems Management*.

2.1.4. Appoint executive agent for IT emerging technologies.

2.1.5. Establish overall guidance, act as approval authority for plans, and resolve proposed consolidation actions for Centralized Repair Activities (CRA).

2.1.6. Act as the approval authority for:

2.1.6.1. Proposed temporary T-1 Air Force Global Information Grid (AF-GIG) system/equipment modifications according to AFI 63-131, *Modification Program Management*.

2.2. **Air Force Space Command (AFSPC).** As Lead Command for all Air Force Cyberspace Operations via the 24AF(AFCYBER), AFSPC will be the Air Force focal point for establishment, operation, maintenance, defense, exploitation, and attack Cyberspace

Operations. AFSPC coordinates the prioritization of all Cyberspace Infrastructure requirements. In addition, AFSPC will:

2.2.1. Control the membership of the EIGS.

2.2.2. Coordinate the establishment of and the schedule for the EIGS composed of representatives from all MAJCOMs for the review, prioritization, and funding of EI projects Air Force-wide.

2.2.3. Ensure program information is documented in the CIPS.

2.2.4. Manage and distribute the consolidated funding for EI (Engineering & Installation) projects.

2.2.5. Manage and distribute the consolidated Military Personnel Appropriation (MPA) man-days for ANG implementation of projects.

2.2.6. In coordination with 38th Cyberspace Engineering Group (38 CEG), monitor the execution of cyberspace projects approved for implementation.

2.2.7. In coordination with the A6 community, develop, manage, and defend EI Program Objective Memorandum (POM) inputs with the information that resides in CIPS.

2.3. **Air Force Network Integration Center.** As a Direct Report Unit to AFSPC, AFNIC is designated as the United States Air Force (USAF) executive agent to develop policy and guidance for cyberspace support activities and related areas to shape, provision, integrate and sustain the AF Cyber Network in all four domains: terrestrial, air, space and cyberspace. In addition, AFNIC will:

Note: "Air Force Flight Standards Agency (AFFSA) will perform Air Traffic Control and Landing Systems (ATCALS) activities for the following paragraphs in paragraph 2.3; 2.3.1.2, 2.3.1.3, 2.3.1.4, 2.3.1.5, 2.3.1.6, 2.3.1.7, 2.3.1.8, 2.3.1.9, 2.3.1.10, and 2.3.3.3".

2.3.1. AFNIC Enterprise Systems Policy, Procedures and Support Division (ESP) will:

2.3.1.1. Manage assigned cyberspace support activities policy, procedures, and MPTO 00-33A-1001.

2.3.1.2. Manage all waiver requests relating to cyberspace support activities.

2.3.1.3. Manage the Air Force Communications Quality Control Checklist (AFCQCC) program.

2.3.1.4. Represent the communications personnel/community as members of workgroups, integrated process/product teams as required.

2.3.1.5. Serve as focal point for Air Force guidance and directives regarding communication systems/equipment modifications except when MAJCOM is designated as the Air Force Lead or lead command per paragraph 2.4.5.

2.3.1.6. Under direction from SAF/A6OD, develop compliance inspection criteria for the Air Force Inspector General (TIGs).

2.3.1.7. Act as focal point for Standard Reporting Designator assignment for non-Air Force Material Command (AFMC) centrally managed commercial items and/or Government-Off-The-Shelf (GOTS) equipment.

2.3.1.8. Manage Depot Purchased Equipment Maintenance, Low Density Level (LDL) assets, non-airborne Readiness Spares Packages (RSP), and provide material management assistance to units.

2.3.1.9. Provide enterprise level equipment analysis capability metrics, such as reliability, availability, and maintainability, utilizing approved automated information system (AIS).

2.3.1.10. Perform unit-funded staff assistance visit (SAVs) upon request and availability of manpower.

2.3.1.11. Manage Information Technology (IT) hardware asset accountability according to AFI 33-112, *Information Technology Hardware Asset Management*.

2.3.2. AFNIC Enterprise Systems Cyber Force Strategies (ESF) will:

2.3.2.1. Manage training resources in support of formal courses, upgrade training, certification training and newly integrated technology training.

2.3.2.2. Support cyberspace operations career fields and systems providing/managing computer based training, instructor led training, and virtual instructor led training.

2.3.3. AFNIC Enterprise Systems Maintenance Management (ESM) will:

2.3.3.1. Perform system management duties and responsibilities as specified in current Memoranda of Understanding (MOU), Memoranda of Agreement (MOA), and Service Level Agreements (SLA).

2.3.3.2. Review MAJCOM recommended changes to Air Force-managed programs, systems/equipment.

2.3.3.3. Assess, evaluate, and ensure compliance with governing directives for communications systems/equipment, as directed or requested.

2.3.3.4. AFNIC Integration Engineering (EN) will:

2.3.3.5. Direct engineering standards and solutions to configuration manage, control, integrate, and optimize Air Force network (AFNet) Cyberspace operations and the core services it provides.

2.3.3.6. Provide engineering analysis and assessment to characterize and resolve AFNet performance, integration, and interoperability issues to meet customer quality of service delivery expectations.

2.4. **Major Commands (MAJCOMs).** MAJCOMs implement Air Force guidance concerning their communications systems/equipment. MAJCOMs will:

2.4.1. Manage and provide support for command-unique programs and systems/equipment.

2.4.2. Coordinate MAJCOM policy, procedures, and Technical Order (T.O.) supplements for implementation consideration affecting cyberspace support activities, subject to the following conditions:

2.4.2.1. Supplements must not be less restrictive than higher level publications or the basic publications being supplemented, and must not contradict or conflict with Air

Force-wide policy, procedure, or publications according to AFI 33-360, *Publications and Forms Management*.

2.4.2.2. Supplements must contain only MAJCOM unique material.

2.4.2.3. Recommended MAJCOM supplements to Air Force publications, forms, and checklists. Also, proposed changes to Air Force-wide communications systems/programs/equipment must be coordinated with the appropriate OPR or lead command.

2.4.3. When designated, perform duties as lead command or system affiliate for communications systems/equipment as specified in AFI 10-901.

2.4.4. Ensure logistics support and life-cycle management plans are developed for MAJCOM-acquired/ procured commercial-off-the-shelf (COTS) communications systems and equipment.

2.4.5. When designated as Air Force Lead (early development) or as lead command, serve as focal point to develop/implement Air Force guidance and directives concerning communications systems/ equipment.

2.4.6. Review and forward all waiver requests relating to communications systems/equipment activities to AFNIC/ES via AFSC 3DXXX Functional Managers. Forward ATCALS waiver requests to AFFSA/A4L.

2.4.7. Act as approval authority for MAJCOM-developed Local Communications Quality Control Checklist (LCQCCs) for command-unique programs, systems and equipment, IAW T.O. 00-33A-1001.

2.4.8. Provide quality assurance (QA) guidance, if required**. Note:** QA guidance for ATCALS will be provided by AFFSA via the Air Traffic System Evaluation Program (ATSEP).

2.4.9. Manage and act as approval authority for support/maintenance assistance requests. Assistance requests may be accomplished if unit-funded and manpower is available.

2.4.10. Establish focal point for CRA management, if applicable.

2.4.11. Prioritize their own work plan(s) and provide representatives to the EIGS for the review, prioritization, and funding of projects Air Force-wide. Reference paragraph 2.6. for EIGS structure.

2.4.12. Designate appropriate system functional managers.

2.5. **Engineering and Installation Governance Structure (EIGS).** EIGS organizations include the EIGS Council (composed of MAJCOM two-letter representatives), the EIGS Board (MAJCOM three-letter level), and the EIGS Group (MAJCOM four-letter level) which prioritize and approve EI requirements Air Force-wide. In addition, the EIGS will:

2.5.1. Provide senior leader guidance to Cyberspace program planners to help determine project priorities.

2.5.2. Develop minimum submission criteria, provide guidance, and set the schedule for cyberspace infrastructure work plans.

2.5.3. Establish the funding "cut line" for the EI PEC (Program Element Code) 27436F based on the amount disbursed.

2.5.4. Review the priorities, adjust them if needed, and approve a single consolidated Air Force-wide centralized EI work plan, considering both contractual implementation and organic implementation.

2.5.5. In coordination with 38 CEG, monitor execution of approved EI requirements.

2.6. **38th Cyberspace Engineering Group (38 CEG).** The 38 CEG plans, designs, engineers, and documents interoperable cyberspace systems to support the Air Force war fighting mission. In addition, the 38 CEG will:

2.6.1. Provide engineering planning and consultation to plan, program, and budget for life-cycle support of base-level cyberspace infrastructure to ensure standardized integration of emerging technologies and the use of IT Lean process working with MAJCOMs and base level organizations.

2.6.2. Provide Subject Matter Expert (SME) consultation and engineering support to all Air Force customers in all cyberspace infrastructure asset/commodity and local commercial services.

2.6.3. Provide Air Force-wide cyberspace infrastructure assessments to identify shortfalls. Provide management functions for upward generated and downward directed cyberspace infrastructure requirements through CIPS. Provide support for documentation and development of training material for CIPS.

2.6.4. Provide engineering planning, implementation, management, and consultation support to enable establishment of forward operating bases, combatant command, Air Force, and Joint service net-centric environment transition activities to include technical support for program objective memoranda cycle and architecture planning assistance.

2.6.5. Initiate, organize, and manage integrated process teams to include engineering, installation, and contracting personnel in support of funded project implementation to ensure coordinated and successful completion.

2.6.6. Publish and maintain Base Information Transport System Engineering Planning (BITSEP) guidance. Documentation is currently located at **https://www.my.af.mil/gcss-af/USAF/ep/browse.do?programId=t5FDEA9F023389B6301234D0DE838015D&channelPageId=sF575FC8E22DC74AF01230AFDFC071A07**.

2.6.7. Review system program office program documentation and facilitate coordination of planning and implementation to MAJCOMs and field level organizations.

2.6.8. Be the CIPS Program Office (PO). The CIPS PO in conjunction with the Oversight Group is responsible for developing, implementing, and fielding CIPS. The 38 CEG/CC chairs the CIPS Oversight Group consisting of MAJCOM representatives.

2.6.8.1. Manage the system and account administration for CIPS.

2.6.8.2. Establish standard terminology and symbology for use within CIPS. (Reference MPTO 00-33D-3003, *Managing the Cyberspace Infrastructure with the Cyberspace Infrastructure Planning System*.)

2.6.9. Provide for both contract and organic implementation of cyberspace infrastructure requirements. Reference MPTO 00-33D-3003 for additional information.

2.6.9.1. Provide overall enterprise monitoring of all funded and assigned projects for implementation.

2.6.9.2. Provide, manage, and maintain contracting documents for Air Force-wide as well as local project implementations, Operations and Maintenance (O&M), and local Communications Service Authorization (CSA). Additionally assist MAJCOMs and bases in the management of communication services authorization procedures to include contractor liaison activities.

2.6.9.3. Coordinate with MAJCOM and Wings to maintain situational awareness of implementations and provide reach back support to resolve implementation issues.

2.6.10. Chair the EI Total Force Group conferences.

2.6.11. Provide specialized engineering services. See MPTO 00-33D-3003 for additional information.

2.6.12. Act as the EI MPA man-day Functional Area Manager in accordance with (IAW) AFI 36-2619, *Military Personnel Appropriation (MPA) Man-Day Program.*

2.6.13. Oversee the System Telecommunications Engineering Manager (STEM) program IAW MPTO 00-33D-2002.

2.6.14. Act as the AFNet STEM keeping blueprints for the AFNet to include all migrated bases, data centers, Integrated Network Operations & Security Center, Enterprise Service Unit, and Enterprise IT Service Desk (ESD).

2.7. **Program Managers.** Program managers will document their program information in CIPS IAW MPTO 00-33D-3003, AFI 63-101, and AFI 33-101.

2.8. **Engineering and Installation Total Force Group.** The Engineering and Installation Total Force Group (TFG) provides the organic capability to implement EI projects. The TFG consists of the 38 CEG, 85th Engineering and Installation Squadron (EIS), ANG lead EI Group, and 16 ANG EI squadrons. The TFG enterprise is jointly managed by the 251 CEIW, the 38 CEG, and the 85 EIS. The National Guard Bureau (NGB)/A6O and the 38 CEG have oversight and management responsibility for the TFG process. Conferences will be held to recommend projects for EI implementation to 38 CEG. In addition, the TFG will:

2.8.1. Review EIGS prioritized projects and make recommendations for organic implementation.

2.8.2. Dispense EIGS approved projects for organic implementation.

2.9. **Unit Commanders.** Unit or Communications Group commanders of communications personnel will:

2.9.1. Implement all applicable programs listed in MPTO 00-33A-1001.

2.9.2. Unit establishes QA work center directly under the commander. Communications Group establishes a QA work center logically under the commander, but may reside physically in the Commander Support Squadron. **Note:** except for ATCALS work centers, systems, and personnel which will be accomplished by the MAJCOMS via the

Air Traffic System Evaluation Program (ATSEP). *DATCALS (Deployable Air Traffic Control and Landing Systems) will continue to be aligned under the purview of the local unit.*

2.9.3. Review system, equipment, training, and certification programs with organizational leadership to ensure compliance with Air Force standards on a regular basis.

2.9.4. Ensure only Air Force-approved AIS such as Integrated Maintenance Data System (IMDS), Remedy, Telephone Management System (TMS), CIPS, and Training Business Area (TBA) are used for all customer service requests/work orders and training documentation unless granted a higher headquarters waiver. **Note**: Follow approved security classification guide or authoritative SAP and DNI guidance when applicable.

2.9.5. Ensure life cycle management and logistics support are available and used for sustained operations for unit-acquired COTS systems and equipment.

2.9.6. Ensure all systems/equipment supported by cyberspace support activities is tracked in the approved AIS to include antennas.

2.9.7. If applicable, operate a CRA.

2.9.8. Submit Joint Tactical Radio System (JTRS) waivers IAW AFI 33-106, Managing High Frequency Radios, Personal Wireless Communication Systems, and the Military Affiliate Radio System.

2.9.9. Be the "Approval Authority" for CIPS accounts IAW MPTO 00-33D-3003.

2.9.10. Validate the base blueprint in CIPS prior to Installation commander's endorsement (reference AFTO Form 330, *Base Blueprint Endorsement Checklist*).

2.9.11. Manage and document base infrastructure projects in CIPS. Coordinate and prioritize base infrastructure projects in CIPS for current and out years. Reference MPTO 00-33D-3003.

2.9.12. Prioritize and approve projects on Work Plan submissions.

2.9.13. Appoint a primary and alternate CIPS Organizational Structure Manager to maintain the organizational tree IAW AFI 38-101, *Air Force Organization*, and AFPD 38-1, *Organization and Unit Designations*.

2.10. **Flight Commander/Flight Chief.** At a minimum, the Flight Commander and Flight Chief of cyberspace personnel will:

2.10.1. Designate, in writing, personnel authorized to perform ATCALS facility certifications, if performed locally.

2.10.2. Direct PMIs to be accomplished IAW appropriate or established T.O.s or in the absence of T.O.s, commercial manuals or publications.

2.10.3. Publish local workcards (LWC) and/or checklists if required.

2.10.4. Waive the accomplishment or approve deviations of scheduled inspections (e.g., PMIs) under conditions listed in MPTO 00-33A-1001.

2.10.5. Increase frequency or scope of scheduled inspections (e.g., PMIs) or individual inspection requirements when, and if, required.

2.10.6. Coordinate with applicable agencies/units for cyberspace support activities impacting operations.

2.10.7. Authorize use of local CQCCs.

2.10.8. Manage cyberspace deployment processes for equipment, personnel and technical documents.

2.10.9. Serve as approval authority for cannibalization or controlled substitution activities.

2.11. **Work center Supervisors.** At a minimum, work center supervisors of cyberspace personnel will:

2.11.1. Ensure compliance with directives, technical publications, and supplements.

2.11.2. Ensure customer service requests and work orders reflect current system/equipment status.

2.11.3. Understand supervisors' roles and responsibilities in the QA program.

2.11.4. Secure and control government property to include tracking warranty information.

2.11.5. Coordinate scheduled support actions (e.g., Time Change Item (TCI), and Time Compliance Technical Order (TCTO), Time Compliance Network Order (TCNO), Maintenance Tasking Order (MTO), Network Tasking Order (NTO), etc.) with Communications Focal Point (CFP).

2.11.6. Appoint project coordinator [e.g., EI, self-help, Specialized Communications Team (SCT), CIPS], and ensure required duties are accomplished.

2.11.7. Manage test, measurement, and diagnostic equipment and other test equipment.

2.11.8. Establish a comprehensive safety program to include such programs as Radio Frequency Radiation, Hazard Material, Hazard Communication, confined space, facility grounding, lock out/tag out, and climbing training.

2.11.9. Manage work center corrosion prevention and control program (CPCP) and electrostatic discharge program according to AFI 21-205, *(S) Command Disable System (CDS) (U)*.

2.11.10. Ensure work center logistics support management responsibilities are accomplished.

2.11.11. Maintain historical files and master inventories on communications systems/equipment.

2.11.12. Maintain asset/commodity information in CIPS in accordance with MPTO 00-33D-3003.

2.12. **Communications Focal Point (CFP).** In the base communications squadron/flight, the CFP is the combination of the Maintenance Operations Center, telephone helpdesk and the traditional network helpdesk functions. The CFP function has tactical control (TACON)

of the client service team (CST) Work center. The CST unit commanders retain administrative control of CSTs. The CST Work center retains TACON of all CSTs assigned to the base. **Note:** CFP and ESD integration is contained in MPTO 00-33A-1001. The CFP will:

Note: For ATCALS CFP duties refer to TO 00-33A-1001.

2.12.1. Manage customer service requests, work orders, and equipment status reporting.

2.12.2. Provide a 24-hour contact number to customers/users and base Command Post.

2.12.3. Manage/review approved AIS management products for accuracy and analyzes data for negative trends.

2.12.4. Manage reports (e.g., situational reports (SITREP), communications statistics, etc.) and disseminate to appropriate personnel for action. The CFP will disseminate monthly ticket and activities information to the unit commander.

2.12.5. Document and control removal/replacement/cannibalization actions.

2.12.6. Act as focal point for depot maintenance requests.

2.12.7. Ensure master PMI schedule is entered into the AIS and includes antennas.

2.12.8. Review, direct, and monitor accomplishment of scheduled and unscheduled support actions (e.g., TCI, TCTO, TCNO, MTO, NTO, outages, etc).

2.12.9. Serve as focal point (i.e., sub-system manager) for the Air Force-approved AISs (e.g., IMDS, Remedy, etc.).

2.12.10. Develop procedures to sustain operations in the event of power failure, communications outage, etc.

2.12.11. Review all SLAs, MOAs, or MOUs for applicability and impact to current cyberspace support activities according to AFI 25-201, *Support Agreements Procedures*.

2.12.12. Provide customers with reporting procedures for communications systems outages/problems.

2.12.13. Perform the Logistics Service Center (LSC) liaison duties of Mission Capable and Turn-Around (TRN) Monitors.

2.12.14. Act as the main interface with the AFNet ESD.

2.12.15. Forward all CIPS requirements to the appropriate authority for implementation.

2.13. **Quality Assurance (QA).** The QA program is responsible directly to the commander or deputy. The QA program applies to all cyberspace AFSCs who sustain systems. At a minimum, QA personnel will:

Note: For ATCALS QA duties refer to TO 00-33A-1001.

2.13.1. Provide assistance, advice, and authoritative references to work center supervisors and unit leadership.

2.13.2. Establish and maintain a technical publications program (e.g., technical orders, Air Force Network Standard Operating Procedures, etc.).

2.13.3. Manage Quality Assessments and Trend Analysis activities using Air Force approved systems.

2.13.4. Process material and T.O. deficiencies.

2.13.5. Review work center facility, systems installation, and equipment records management.

2.13.6. Perform technical reviews of modifications proposals and process valid proposals according to applicable directives.

2.13.7. Perform CPCP and electrostatic discharge (ESD) focal point duties according to AFI 21-105.

2.13.8. Review locally devised checklists, operating instructions, publications, and directives annually.

2.13.9. Submit changes to various publications, T.O.s and other guidance.

2.13.10. Review statements of work where cyberspace support activities are outsourced.

2.13.11. Complete Air Force Job Qualification Standard (AFJQS) 3DXXX-201G, *Quality Assurance*, within 180 days of assuming responsibilities unless previously completed and documented. Use this AFJQS as a guide for training Quality Assurance Representative (QAR) personnel.

2.13.12. Validate and manage LWCs.

2.13.13. Use applicable AFCQCCs during evaluations according to MPTO 00-33A-1001.

2.13.14. Perform in-process, acceptance, deactivation, or transfer inspections on equipment/systems being overhauled, repaired, installed, removed, or newly acquired.

WILLIAM T. LORD, Lt Gen, USAF
Chief of Warfighting Integration and Chief
Information Officer

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFI 10-901, *Lead Operating Command - Communications and Information Systems Management,* 22 March 2001

AFI 20-101, *Logistics Strategic Planning Procedures,* 12 November 1993

AFI 21-205, *(S) Command Disable System (CDS) (U)*, 24 October 2007

AFI 25-201, *Supports Agreements Procedures*, 1 May 2005

AFI 33-100, *User Responsibilities and Guidance for Information Systems,* 19 November 2008

AFI 33-101, *Commanders Guidance and Responsibilities,* 18 November 2008

AFI 33-111, *Voice Systems Management,* 24 March 2005

AFI 33-360, *Publications and Forms Management*, 18 May 2006

AFI 36-2619, *Military Personnel Appropriation (MPA) Man-Day Program,* 22 July 1994

AFI 38-101, *Air Force Organization,* 16 March 2011AFI 63-101, *Acquisition and Sustainment Life Cycle Management,* 17 April 2009

AFI 63-1101, *Modification Management,* 17 July 2001 (superseded by AFI 63-131, *Modification Program Management,* dated 6 November 2009)

AFMAN 23-110, *USAF Supply Manual,* 1 April 2009

AFMAN 33-363, *Management of Records*, 1 March 2008

AFPD 33-1*, Information Resources Management,* 27 June 2006

AFPD 33-3, *Information Management,* 28 March 2006

AFPD 38-5, *Unit Designation*, 1 July 1966

MPTO 00-33A-1001 *General Communications Activities Management Procedures and Practice Requirements*, 31 March 2010

MPTO 00-33D-3003, *Managing the Cyberspace Infrastructure with the Cyberspace Infrastructure Planning System*, 30 December 2010

T.O. 32-1-101*, Use and Care of Hand Tools and Measuring Tools,* 1 December 2004

Prescribed Forms

No forms are prescribed by this publication

Adopted Forms

AFTO Form 330, *Base Blueprint Endorsement Checklist*, AF Form 673, *Air Force Publication/Form Action Request,* and AF Form 847, *Recommendation for Change of Publication*. See MPTO 00-33A-1001*,* for other adopted forms.

Abbreviations and Acronyms

AF—Air Force (as used in forms)

AFC2IC—Air Force Command and Control Integration Center

AFCQCC—Air Force Communications Quality Control Check sheet

AFFSA—Air Force Flight Standards Agency

AFI—Air Force Instruction

AFJQS—Air Force Job Qualification Standard

AFMAN—Air Force Manual

AFMC—Air Force Material Command

AFNIC—Air Force Network Integration Center

AFPD—Air Force Policy Directive

AFRC—Air Force Reserves Command

AFSC—Air Force Specialty Code

AFSPC—Air Force Space Command

AIS—Automated Information System

ALC—Air Logistics Center

ANG—Air National Guard

ATCALS—Air Traffic Control and Landing Systems

ATSEP—Air Traffic System Evaluation Program

CFETP—Career Field Education and Training Plan

CFP—Communications Focal Point

CIPS—Cyberspace Infrastructure Planning System

CITS—Combat Information Transfer Systems

COTS—Commercial-off-the-shelf

CPCP—Corrosion Prevention and Control Program

CRA—Centralized Repair Activity

CSA—Communications Service Authorization

CSC—Client Service Center

CST—Client Service Team

DATCALS—Deployable Air Traffic Control and Landing Systems

DNI—Director of National Intelligence

DOD—Department of Defense

DRU—Direct Reporting Unit

EI—Engineering and Installation (also E&I)

EIGS—Engineering and Installation Governance Structure

ESD—Enterprise IT Service Desk

FOA—Field Operating Agency

GOTS—Government Off-The-Shelf

IAW—In Accordance With

IMDS—Integrated Maintenance Data System

IT—Information Technology

JTRS—Joint Tactical Radio System

LDL—Low Density Level

LSC—Logistics Service Center

LWC—Local Workcards

MAJCOM—Major Command

MOA—Memorandum of Agreement

MOU—Memorandum of Understanding

MPA—Military Personnel Appropriation

MPTO—Methods and Procedures Technical Order

MTO—Maintenance Tasking Order

NAF—Numbered Air Force

NTO—Network Tasking Order

O&M—Operations and Maintenance

OPR—Office of Primary Responsibility

PEC—Program Element Code

PMI—Preventative Maintenance Inspection

PMO—Program Management Office

QA—Quality Assurance

QAR—Quality Assurance Representative

RDS—Records Disposition Schedule

SAF—Secretary of the Air Force

SAP—Special Access Program

SCT—Specialized Communications Team

SITREPS—Situational Reports

SLA—Service Level Agreement

STEM—System Telecommunications Engineering Manager

TACON—Tactical Control

TBA—Training Business Area

TCI—Time Change Item

TCNO—Time Compliance Network Order

TCTO—Time Compliance Technical Order

TFG—Total Force Group

TMS—Telephone Management System

T.O.—Technical Order

TRN—Turn-Around

USAF—United States Air Force

Terms

Air Force—**Approved AIS**—An Air Force-approved automated information system is any system that the Air Force maintains and operates at an enterprise level such as Cyberspace Infrastructure Planning System (CIPS), Integrated Maintenance Data System (IMDS), Training Business Area (TBA), Remedy, and Telephone Management System (TMS). MAJCOM-unique systems are not Air Force-level AISs.

Air Force Communications Special Instructions—AFCSIs provide a means to temporarily issue inspection and servicing requirements, operational performance checks, and special instructions related to standard communications equipment for which formal T.O. procedures are not yet published. They may also provide a means to issue optional or temporary modifications on communications equipment. They are only published for equipment that is applicable to more than one MAJCOM and until applicable T.O. can be developed.

Air Force—**Global Information Grid (AF-GIG)**—The Air Force-provisioned portion of the Global Information Grid (GIG) that the Air Force has primary responsibility for the procurement, operations, and defense. It provides global connectivity and services, in addition to C2 of that connectivity and those services that enable Air Force commanders to achieve information and decision superiority in support of Air Force mission objectives. The AF-GIG consists of fixed, mobile, and deployable facilities, and equipment, as well as processes, trained personnel and information.

Assets/Commodities—Refers to the list of communications categories that provide a communications capability: Distribution Systems, Data, Flight Support Systems, Long Haul Comm., Network Control Center, Premise Wiring, Public Address, Radio, Security, Video, and Voice Switching Systems. This includes equipment and infrastructure.

Cannibalization—Cannibalization is the removing of parts from one end item and placing the removed parts into another like item. This is done to restore systems/equipment quickly. The part

is then ordered and installed into the item which the part was removed from to restore the first item.

Centralized Repair Activity (CRA)—Consolidates support and supply resources at designated locations to support dispersed equipment. It integrates support, supply and other logistics elements providing a cohesive support program that enhances logistics responsiveness and operational effectiveness while reducing costs (see AFMAN 23-110 Volume 2, Part 2, Chapter 21, Section 21N).

Certified Personnel—Certified personnel are qualified personnel who have completed hands-on performance training designed to qualify an airman in a specific position (duty position or skill-level), however they have been evaluated by an outside source (e.g., QA, Stan/Eval, Cisco, Microsoft, etc). In the CFETP, the task certifier block is used to document third party certifications if required by your Air Force Career Field Manager (AFCFM). Not all tasks require certification on the CFETP however once that specific task has been certified by an outside source, it can reflect that certification. Also to certify ATCALS equipment and systems, the qualified personnel needs to be certified on the equipment or systems being ATCALS certified.

Client Service Center (CSC)—The Client Service Center (CSC) is the work center that will perform the following functions Communications Focal Point, Voice/Video/Data/Personnel Wireless Communications System Appliances, Account Management, and Asset Management. These functions are responsible issuing and tracking communications systems/equipment.

Commercial—Off-The-Shelf (COTS)—COTS systems or equipment are products/items designed and manufactured for commercial use, purchased, and used "as-is" by the military.

Cyberspace support activity—Any actions taken to restore communications systems/equipment to operational status, to perform preventive maintenance inspections (PMI) on communications systems/equipment, and/or component, or to install or remove communications systems/equipment.

Communications Focal Point (CFP)—CFP is the consolidation of help desk, telephone trouble tickets and Maintenance Operations Center. This function tracks all communications systems/equipment and/or component outages and resides with the Client Service Center (CSC) work center.

Communications systems/equipment—Any item maintained, restored, installed or removed by cyberspace personnel to include circuits. "Communications systems" are defined as: transmission, switching, processing, systems-control, and network management systems, as well as equipment, software, and facilities, fixed and deployable, that supports a mission area. Examples include: Air Traffic Control and Landing Systems (ATCALS), base telephone switches, cable plants, cable television, Automated Message Handling System (AMHS), Defense Message System (DMS), antennas, land mobile radio systems and cryptographic systems. The Air Force-provisioned portion of the Global Information Grid (GIG) that the Air Force has primary responsibility for the procurement, operations, and defense. It provides global connectivity and services, in addition to C2 of that connectivity and those services that enable Air Force commanders to achieve information and decision superiority in support of Air Force mission objectives. The AF-GIG consists of fixed, mobile, and deployable facilities, and equipment, as well as processes, trained personnel and information. This document implements

DoD Directive (DoDD) 8100.1, *Global Information Grid (GIG) Overarching Policy,* and defines Air Force roles and responsibilities for protecting and maintaining the AF-GIG; and also encompasses terrestrial, space and airborne networks [networks are defined as all wired and wireless information (data/voice/video) exchange systems - even if not Internet Protocol (IP)-based].

CyberspaceCDefined in JP 1—02 as "A global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the internet, telecommunications networks, computer systems, and embedded processors and controllers." Air Force considers cyberspace to be a physical domain and therefore subject to all physical laws of nature. In a physical sense, the Air Force considers cyberspace to include things such as the internet (Global Information Grid or GIG), telecommunications networks (combat communications, satellite communications), computer systems, network operations and command and control [e.g., Air Force Network Operations Center, Integrated Network Operations Security Centers (I-NOSC)], and embedded processors and controllers.

Cyberspace Infrastructure—Refers to the equipment and network infrastructure to provide the internet, telecommunications network, network operations, command and control and embedded processors and controllers.

Engineering Installation—Program that provides engineering, implementation, restoral, removal and reconstitution of Air Force cyberspace infrastructure. The program focuses on the highest priority cyber infrastructure requirements impacting the Air Force.

Executive Agent—Indicates a delegation of authority by a superior to a subordinate to act on behalf of the superior. An agreement between equals does not create an executive agent. Designation as executive agent, in and of itself, confers no authority. The exact nature and scope of the authority delegated must be stated in the document designating the executive agent. An executive agent may be limited to providing only administration and support or coordinating common functions or it may be delegated authority, direction, and control over specified resources for specified purposes.

Flight Commander and Flight Chief—Any officer, enlisted or civilian member fulfilling those duties serving over the flight of personnel.

Global Information Grid (GIG)—The globally interconnected, end-to-end set of information capabilities, associated processes, and personnel for collecting, processing, storing, disseminating and managing information on demand to warfighters, policy makers, and support personnel. The GIG includes all owned and leased communications and computing systems and services, software (including applications), data, security services, and other associated services necessary to achieve Information Superiority. It also includes National Security Systems as defined in section 3542(b) (2) of Title 44 United States Code (U.S.C.). The GIG supports all DoD, National Security, and related Intelligence Community missions and functions (strategic, operational, tactical, and business), in war and in peace. The GIG provides capabilities from all operating locations (bases, posts, camps, stations, facilities, mobile platforms, and deployed sites). The GIG provides interfaces to coalition, allied, and non-DoD users and systems. It includes any system, equipment, software, or service that meets one or more of the following criteria: transmits information to, receives information from, routes information among, or interchanges information among other equipment, software, and services; provides retention, organization, visualization, information assurance, or disposition of data, information, and/or

knowledge received from or transmitted to other equipment, software, and services; processes data or information for use by other equipment, software, or services. (10 U.S.C. 2513).

Government Off—The-Shelf (GOTS)—Equipment, systems, and/or products that are typically developed by the technical staff of the government agency for which it is created. It is sometimes developed by an external entity, but with funding and specification from the agency. Because agencies can directly control all aspects of GOTS products, these are generally preferred for government purposes.

Hands-on—Any activity involving active participation to include actual performing the task at hand.

Joint Tactical Radio System (JTRS)—A Defense Department-wide initiative to develop a family of revolutionary software-programmable tactical radios that will provide the warfighter with voice, data and video communications, as well as interoperability across the joint battle space. The JTRS radios envisioned by DoD, expected to begin coming on line in the 2011 or 2012 timeframe, are based on software development that enables one radio to handle various waveforms.

IT Lean Process—The Information Technology Lean (IT Lean) process is a tailored version of the DOD 5000 series acquisition process specifically designed for small IT programs, and applies to systems in acquisition or sustainment including upgrades or modernizations. See AFI 63-101 for use of IT Lean in conjunction with the Security, Interoperability, Supportability, Sustainability and Usability (SISSU) process using EITDR to manage the acquisition process. See AFI 33-210 for use of IT Lean in certification and accreditation, and for scope and limitations of the IT Lean process.

Local Commercial Services—Telecommunications Services provided by the local exchange carrier (LEC) within the local area transport access (LATA).

Low Density Level (LDL)—Low density parts which are positioned at a LSC based on the number of TRNs submitted. There are very few of these parts available and it is a first come, first serve basis request. LSC manages this process in coordination with the unit.

Lead Command—The MAJCOM, DRU, or FOA assigned as the Air Force user advocate.

Maintenance Tasking Order (MTO)—Used by the AFCYBER community to assign workload to a field technician.

Network Tasking Order (NTO)—Used to direct changes to the Air Force-Global Information Grid (AF-GIG).

Quality Assessments—An element in the Quality Assurance (QA) program. Its purpose is to provide assurances, through some type of evaluation, that the Quality System functions are effective. Quality Assessment activities can be categorized as either internal or external assessments, evaluations, audits, or certifications. The QA program may use technical, personnel, and managerial evaluations to fill these requirements.

Quality Assurance (QA)—Embodies a leadership philosophy that creates and inspires trust, teamwork, and a quest for continuous, measurable improvement throughout the working/production environment in the organization. It is the commander's tool for ensuring that a process, end item or service is of the type and quality to meet or exceed requirements for effective mission operations. It performs regular evaluations on unit personnel, equipment, and

programs to ensure unit is adhering to the instructions and technical publications and properly maintaining system/equipment. QA program consists of three essential elements: Quality System, Quality Assessments, and Trend Analysis. These three elements create an environment supporting the key objective of continuous process improvement.

Quality Assurance Representative (QAR)—Appointed by the commander, complete required training, then assist the QA work center in the accomplishment of evaluations.

Qualified Personnel—Personnel who have completed hands-on performance training designed to qualify an airman in a specific position (duty position or skill-level). Qualifications training occur both during and after upgrade training to maintain up-to-date qualifications and are used to determine qualified personnel. This does not mean personnel are certified.

Situational Reports (SITREPS)—Reports generated by a command and control authority/function that advises leadership of a situation.

Specialized Communications Team (SCT)—Provides a specialized maintenance and training capability above those normally found in the O&M units. SCTs perform emergency restoral of failed or degraded facilities, systems, or equipment and provide follow-on training to prevent recurrence of the problem.

Support Activities—Any actions or processes (e.g., publication management, time change management) that assist personnel with supporting the communications systems/equipment. The activities minimize fraud waste and abuse and provide common practices among all cyberspace personnel no matter the duty location.

System Affiliate—A MAJCOM or agency designated by a negotiated formal agreement with the lead.

Systems/equipment—See Communications systems/equipment.

Time Change Item (TCI)—Scheduled actions that personnel perform to support a piece of equipment. They are listed in the technical publications and occur as deemed. For example: replacement of the oil after 3000 hours of operation.

Time Compliance Network Order (TCNO)—Generated by AFCYBER/Air Force Combat Communications Center (AFCCC) and direct a change to systems/equipment. Air Force level TCNOs are converted to TCTOs if required by the Program Management Office (i.e., Combat Information Transport System [CITS], etc.).

Time Compliance Technical Order (TCTO)—Directs a modification or change to a system or piece equipment and are published by the Program Management Office (PMO).

Tools—Any device used to restore, repair, change, modify, clean, etc. a piece of communications equipment. Tools can be physical items such as a screwdriver, pad, resistor, junction boxes, hammer, pre-made cabling, etc., as well as software items such as restoral disks, software imaging disks, drivers, program software, disk duplicator, etc. These items need to be stored and maintained according to MPTO 00-33A-1001, T.O. 32-1-101 and unit guidance/policy.